



### Main

|                                |   |
|--------------------------------|---|
| Range                          | TeSys   |
| Product name                   | TeSys F   |
| Product or component type      | Contacteur  |
| Device short name              | LC1F  |
| Contacteur application         | Resistive load<br>Motor control   |
| Utilisation category           | AC-4<br>AC-3<br>AC-1  |
| Poles description              | 3P  |
| Pole contact composition       | 3 NO  |
| [Ue] rated operational voltage | <= 690 V AC 50/60 Hz  |
| [Ie] rated operational current | 200 A (at <40 °C) at <= 440 V AC-1<br>115 A (at <55 °C) at <= 440 V AC-3  |
| Motor power kW                 | 55 kW at 380...400 V AC 50/60 Hz (AC-3)<br>59 kW at 415 V AC 50/60 Hz (AC-3)<br>59 kW at 440 V AC 50/60 Hz (AC-3)<br>75 kW at 500 V AC 50/60 Hz (AC-3)<br>80 kW at 660...690 V AC 50/60 Hz (AC-3)<br>30 kW at 220...230 V AC 50/60 Hz (AC-3)<br>18.5 kW at 400 V AC 50/60 Hz (AC-4) |
| [Uc] control circuit voltage   | 48 V DC   |
| Coil type                      | Standard  |

### Complementary

|   |   |
|---|---|
| [Uimp] rated impulse withstand voltage      | 8 kV  |
| Overtoltage category                        | III   |
| [Ith] conventional free air thermal current | 200 A (at 40 °C)  |
| Rated breaking capacity                     | 920 A conforming to IEC 60947-4-1   |
| [Icw] rated short-time withstand current    | 1100 A 40 °C - 10 s<br>640 A 40 °C - 30 s<br>520 A 40 °C - 1 min<br>400 A 40 °C - 3 min<br>320 A 40 °C - 10 min |
| Associated fuse rating                      | 125 A aM at <= 440 V<br>200 A gG at <= 440 V  |
| Average impedance                           | 0.37 MOhm - Ith 200 A 50 Hz   |
| [Ui] rated insulation voltage               | 1000 V conforming to IEC 60947-4-1<br>1500 V conforming to VDE 0110 group C                                     |
| Power dissipation per pole                  | 15 W AC-1<br>5 W AC-3   |
| Mounting support                            | Plate   |

|                                |   |
|--------------------------------|---|
| Standards                      | EN 60947-1<br>JIS C8201-4-1<br>IEC 60947-1<br>IEC 60947-4-1<br>EN 60947-4-1   |
| Product certifications         | CCC<br>ABS<br>BV<br>RINA<br>UL<br>LROS (Lloyds register of shipping)<br>DNV<br>RMRoS<br>CB  |
| Connections - terminals        | Power circuit: bar 2 cable(s) - busbar cross section: 20 x 3 mm<br>Power circuit: lugs-ring terminals 1 cable(s) 95 mm <sup>2</sup><br>Power circuit: connector 1 cable(s) 95 mm <sup>2</sup><br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Power circuit: bolted connection |
| Tightening torque              | Power circuit: 10 N.m<br>Control circuit: 1.2 N.m   |
| Control circuit voltage limits | Operational: 0.85...1.1 U <sub>c</sub> (at 55 °C)<br>Drop-out: 0.15...0.2 U <sub>c</sub> (at 55 °C)   |
| Inrush power in W              | 560 W (at 20 °C)  |
| Hold-in power consumption in W | 4.5 W at 20 °C  |
| Heat dissipation               | 4.5 W   |
| Operating time                 | 30...40 ms closing<br>30...50 ms opening  |
| Mechanical durability          | 10 Mcycles  |
| Maximum operating rate         | 2400 Cyc/H 55 °C  |
| Compatibility code             | LC1F  |

## Environment

|   |   |
|---|---|
| IP degree of protection                               | IP2x front face with shrouds conforming to IEC 60529<br>IP2x front face with shrouds conforming to VDE 0106 |
| Protective treatment                                  | TH  |
| Ambient air temperature for operation                 | -40...60 °C   |
| Ambient air temperature for storage                   | -60...80 °C   |
| Permissible ambient air temperature around the device | 60...70 °C at U <sub>c</sub>  |
| Operating altitude                                    | 3000 m without derating   |
| Height  | 162 Mm  |
| Width   | 163.3 Mm  |
| Depth   | 171 Mm  |
| Net weight  | 3.43 Kg   |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 4.16 Kg |
| Package 1 Height             | 22 Cm   |
| Package 1 width              | 20 Cm   |
| Package 1 Length             | 25 Cm   |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Product Life Status : **Commercialised**